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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,335	04/20/2001	Xuemei Zhang	10010256-1	1896

7590 07/05/2005

AGILENT TECHNOLOGIES  
Legal Department, 51U-PD  
Intellectual Property Administration  
P.O. Box 58043  
Santa Clara, CA 95052-8043

EXAMINER

ROGERS, SCOTT A

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/839,335

**Applicant(s)**

ZHANG ET AL.

**Examiner**

Scott A. Rogers

**Art Unit**

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 11 is/are rejected.
- 7) ☒ Claim(s) 2-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/20/01 &amp; 12/23/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim s1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun et al in view of admitted prior art.

#### Referring to claim 1:

Braun et al disclose a technique of remapping image data by:

calculating at least one current image statistic based on said digital image data (page 382, section 4.1, lines 1-23);

receiving said at least one current image and further calculating at least one tone curve parameter based on said at least one current image statistic and at least one perceptual preference (page 381-382, sections 2-3); and

receiving said at least one tone curve parameter and further generating a tone curve using said at least one tone curve parameter and a sigmoidal function, said tone curve being used to remap said digital image data (page 384-387, sections 4.2-4.3).

Braun further discloses prior art output devices having a range on which digital image data is remapped (page 380, section 1, paragraph 1). It is noted also that applicant notes implementation with such known prior art output devices (see paragraph 4 or the specification).

While Braun et al does not disclose the hardware for performing the disclosed technique (i.e., an image statistics processor, calculation logic, tone curve generator), such hardware is well known in the art as admitted by applicant (see paragraphs 4, 26, and 38 of the specification).

It would have been obvious to one of ordinary skill in the art to have applied the image data remapping technique taught by Braun et al with well known hardware in order to provide a practical application of the technique to obtain reproduced images with improved image contrast.

Referring to claim 11:

Braun et al disclose a method of remapping image data by:

calculating at least one current image statistic based on said digital image data (page 382, section 4.1, lines 1-23);

calculating at least one tone curve parameter based on said at least one current image statistic and at least one perceptual preference (page 381-382, sections 2-3);  
and

generating a tone curve using said at least one tone curve parameter and a sigmoidal function, and using said tone curve to map said digital image data (page 384-387, sections 4.2-4.3).

Braun further discloses prior art output devices having a range on which digital image data is mapped (page 380, section 1, paragraph 1). It is noted also that applicant

notes implementation with such known prior art output devices (see paragraph 4 or the specification).

While Braun et al does not disclose receiving the digital image data at a digital image system, such a system is well known in the art as admitted by applicant (see paragraphs 26 of the specification).

It would have been obvious to one of ordinary skill in the art to have applied the image data remapping technique taught by Braun et al with a well known digital image system in order to provide a practical application of the technique to obtain reproduced images with improved image contrast.

***Allowable Subject Matter***

Claims 2-10 and 12-20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

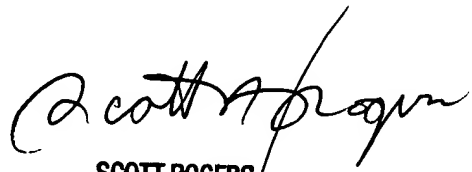
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A Rogers whose telephone number is 571-272-7467. The examiner can normally be reached on Monday & Wednesday 6:00am-6:00pm and Tuesday & Thursday 6:00am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at 571-272-7471.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 Customer Service at 571-272-2600. Official correspondence by facsimile should be sent to 703-872-9306. The USPTO contact Center phone numbers are 800-PTO-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
SCOTT ROGERS  
PRIMARY EXAMINER

27 June 2005